

METHOD AND APPARATUS FOR CONVERTING UTTERANCE  
REPRESENTATIONS INTO ACTIONS IN A CONVERSATIONAL SYSTEM

ABSTRACT OF THE DISCLOSURE

5 A conversation manager processes a spoken utterance from a user of a  
computer that is directed to an application program hosted on the computer. The  
conversation manager includes a reasoning facility which accesses goal-directed rules  
stored in a rules base (e.g., database). The reasoning facility also has access to a  
conversational record that includes a record of previous utterances and a semantic  
analysis for each utterance. The reasoning facility processes a representation of the  
10 utterance by using the goal-directed rules. The reasoning facility uses means-end  
analysis to determine the proper rules to execute, and thus the script calls to make to  
achieve the goal of processing the utterance. While processing the utterance, the  
reasoning facility attempts to resolve any ambiguities in the representation of the  
utterance and to fill in any missing information that is needed to achieve its goal. The  
15 reasoning facility then generates a response to the utterance, which can be a question to  
the user or a command to the application program based on the utterance.